



State of Utah
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DIVISION OF OIL, GAS AND MINING

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December 6, 1994

TO: File

TO: Daron Haddock, Permit Supervisor

FROM: Henry Sauer, Senior Reclamation Soils Specialist *HS*

RE: Mid-Term Permit Review, Cyprus-Plateau Mining Corporation, Starpoint Mine, ACT/007/006, Folder #2, Carbon County, Utah

SYNOPSIS

This writer has reviewed the reclamation plan for the Star Point Mine Refuse Pile. The reclamation proposal for the refuse pile will be the focus of the forthcoming mid-term permit review.

The permittee has not adequately demonstrated that the Star Point Mine Refuse Pile will be successfully reclaimed.

Regulatory Requirements: R645-301-553.250 & 300. Refuse Piles.

Analysis:

The refuse pile reclamation configuration, depicted on the Postmining Topography Map (Plate 542.200), show long, continuous, 2H:1V side slopes. The reclamation plan calls for the construction of contour furrows and minor surface pitting (Page 300-135). No application of surface mulch is proposed and the redistribution of topsoil utilizing rubber-tired equipment is contemplated. ~~In this writers experience~~ The implementation of these practices will result in excessive erosion and poor plant establishment.

Findings:

The permittee has not adequately demonstrated that reclamation of the Refuse Pile as required by R645-301 and R645-302 can be achieved.

Recommendation:

The permittee must either adequately improve the reclamation plan and/or provide additional technical information which will demonstrate that the current and/or the improved refuse pile



reclamation plan will fulfill the requirements of the R645 Coal Mining Rules.

Regulatory Requirements: R645-301-731.300 Acid- and Toxic-Forming Materials

Analysis:

The permittee contemplates the redistribution of ten inches, seventeen inches and four feet of topsoil cover on the refuse pile at the time of final reclamation. According to the plan, preliminary examination of the Revegetation Test Plots indicate that the refuse pile may be reclaimed and meet applicable vegetation performance standards with as little as ten inches of "topsoil". The permittee goes on to state that seventeen inches of topsoil is currently available for the reclamation of the refuse pile.

In addressing Stipulation UMC 817.71-74-(1)-(PGL/DD/RVS) the permittee has committed to conducting a refuse sampling plan two years prior to the start of reclamation activities on site (See Section 528). The purpose of the sampling plan is to identify areas on the surface of the refuse pile which may be occupied with acid-and/or toxic-forming materials. The permittee has committed to covering these areas with four feet of non-combustible, non-acid and non-toxic forming material. If the results from the revegetation test plots and vegetative selenium testing demonstrate that less than four feet of cover will meet the goals of reclamation the CPMC will formally request a variance from R645-301-553.252.

Suspect levels of selenium have been identified within the refuse material disposed of in the refuse pile. The accumulation of selenium in plants grown on the refuse may result in plant uptake, herbivore toxicity and failure to meet postmining land use performance standards.

Findings:

The permittee has not adequately demonstrated that the reclamation plans will control impacts to surface and ground water and minimize adverse effects on plant growth and the approved postmining land use.

Recommendation:

The permittee must affirmatively demonstrate the adequacy of the proposed refuse pile burial and treatment plans. The permittee must also identify the source(s) of soil cover and demonstrate the suitability of additional soil cover.

CC: Susan White, Tom Manson, Wayne Western

H:CPMC-Mid